

IV. Remarks

Status of the Claims

Claims 1,3-7,9-11,13,16,19,21-32, and 35-37 are amended. Claims 15,17,18,20, and 38-43 are canceled. Claims 44-61 are added. Claims 1,3-7, 9-11,13,16,19,21-37 and 44-61 remain under consideration.

Summary of the Office Action

Former Claims 1,3-5,7,9-11,13,15-17,20,21-29,31-40, and 42 stand rejected under 35USC102(e) on the basis of the cited reference Endsley, et al, U.S. Patent No. 5,541,471. Claim 6 stands rejected under 35USC103(a) on the basis of Endsley in view of the disclosure of Miyake, U.S. Patent No. 6,400,413. Claims 18 and 41 stand rejected under 35USC103(a) on the basis of Endsley in view of the disclosure of Dei, U.S. Patent No. 6,496,276. Claims 19,30, and 43 stand rejected under 35USC103(a) on the basis of Endsley in view of the disclosure of Hsieh, et al, U.S. Patent No. 5,969,750. The Examiner is respectfully requested to reconsider his rejection in view of the following remarks.

Applicants have amended the specification to conform to the proper form and have amended the reference numeral with respect to the system bus. No change to the drawing is therefore necessary.

Applicants submit that the amendments to claim 13 remedy the objection raised by the Examiner and further it is submitted that the amendments to claims 19 and 30 fully remedy the basis for the rejections to claims 19 and 30 based on 35USC112. It is therefore respectively requested that such objection and rejection be reconsidered.

The Invention

The claims of the present application, as amended, relate to the interfacing of a built-in camera module with the electronic device into which it is incorporated. An internal serial bus (21, 28, 31) is used for communication between the camera unit and the main communication bus (32) of the electronic device (see Figure 2b). The technical advantage provided by this solution is that a single type of camera unit (including e.g. a built-in serial interface) can be used in fabrication of both external and built-in camera modules (as evidenced by the identical features of Figures 2a and 2b), thereby leading to a reduction in production costs.

Discussion of the Cited References

The Examiner relies primarily on the reference Endsley patent (US 5,841,471). This reference relates to interfacing an external camera module only. The camera module can be connected to a host computer via a USB bus. There is no discussion with respect to utilizing an intervening serial bus for connection between the camera and the host computer. None of the other cited references remedy the deficiencies in the reference Endsley.

The Issue of Anticipation

It is well settled that a claim is anticipated, "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." (See CHISOLM, Federal Circuit Guide, Pg. 1221).

"...it must be shown that the reference contains all of the elements of the claims apart from irrelevant or merely extraneous variations, and the elements are arranged in the same way to achieve the same result which is asserted to be an inventive function..." 454 U.S. 1129 (1981)

The elements of the claim and their function and purpose within the claim must be reviewed in a manner similar to an infringement analysis. If the device described in the cited reference would not infringe if it was later, it will not anticipate if the reference is earlier.

Applying this standard to the device of the reference Endsley, it becomes clear that it is missing significant elements of independent claims 1, 7, and 13. There is no provision in the system of Endsley for using an internal serial bus to connect the camera module to the electronic device. Claim 1 states:

"transferring the digital image information from the camera module to the electronic device via an internal serial connection bus of the electronic device."

Equivalent language also is contained in claim 7 and 13. Since these elements form no part of the system of Endsley, there would be no infringement if Endsley was later, therefore, the cited reference does not support the rejection by the Examiner based on anticipation.

The above arguments are equally applicable to the rejected dependent claims.

The Issue of Obviousness

In each of the rejections based on 35USC103, the Examiner relies on the cited reference Endsley. As indicated above, this reliance is not supported by the reference. Accordingly, the rejections based on obviousness must also fail because they are not supported by the primary reference Endsley. None of the other cited references remedy the deficiency of the teaching of Endsley and therefore such combinations do not support the remaining rejections.


In view of the remarks stated above, Applicant submits that

all of the claims under consideration contain patentable subject matter and favorable action by the Examiner is respectfully requested.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A check including the amount of \$1274.00 is enclosed for a three month extension of time and additional claim fees. The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,


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